

IN THE CLAIMS

Amend the claims in accord with the attached copy thereof.

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1. (previously amended) A helical shielded twisted pair data cable comprising an individual insulated twisted pair cable,

a shielding tape selected from the group consisting of a metal tape, a first composite tape having a non-metal base and a layer of metal on one side of said base, and a second composite tape having a non-metal base and a layer of metal on both sides of said base;

said shielding tape being helically wrapped with an overlap of 45-55% and at a angle to the longitudinal axis of the twisted pair cable of 30-45° around said twisted pair cable;

said shielding tape having a metal thickness of 0.75 to 1.25 mils ~~0.33 to 2.00 mils~~;

said shielding tape being wrapped around said twisted pair at a tension to eliminate a substantial amount of the air to leave a cross-sectional void area of less than 18% ~~25%~~ of the cross-sectional area of the shielded twisted pair cable to provide said helical shielded twisted pair data cable ; and

to provide said helical shielded twisted pair data cable ~~twisted pair data cable~~ with a rating at least out to 600 MHz and an adjusted to 20°C. standard impedance deviation of 3.5 or less when said standard deviation is calculated around a mean or average impedance of 90 to 110 ohms ~~50 to 200 ohms~~.

2. (original) The cable of claim 1 wherein,

said cable has a rating at least out to 600 MHz; and

said standard impedance deviation is measured on a 328 ft. or longer cable with at least 350 frequency measurements taken from 1.0 to 600 MHz and said standard impedance deviation is 3.5 or less and calculated around the mean or average impedance of 90 to 110 ohms.

3. (cancelled)

4. (currently amended) The cable of claim 2 wherein,

said shielding tape has a width of 0.5 to 1.5 inches , ~~and is helically wrapped with the overlap of 25-65% and at a angle to the longitudinal axis of the twisted pair cable of 30-45°~~.

5. (cancelled)

6. (original) The cable of claim 1 further comprising

at least four of said helical shielded twisted pair cables,

a jacket surrounding said at least four bound helical shielded twisted pair cables to provide a high performance data cable;

said high performance data cable is rated at least out to 600 MHz;

said high performance data cable has an adjusted to 20°C. average standard impedance deviation of 3.5 or less when taken on a 328 ft. or longer high performance data cable; and

said average standard impedance deviation is the average of all of the standard impedance deviations measured on each of said at least four helical-shielded twisted pair cables with at least 350 frequency measurements from 1.0 to 600 MHz and calculated around the mean or average impedance of 90 to 110 ohms, and no single standard impedance deviation is greater than 4.5 from said mean or average impedance.

7. (currently amended) The cable of claim 6 wherein

said shielding tape has a width of 0.5 to 1.5 inches, ~~and is helically wrapped with the overlap of 25-65% and at an angle to the longitudinal axis of the twisted pair cable of 30-45°.~~

8. (cancelled)

9. (currently amended) The cable of claim 7 & wherein the cable is bundled prior to being jacketed.

10. (original) A method of preparing a helical twisted pair data cable comprising

providing an individual insulated twisted pair cable;

helically wrapping said twisted pair cable with a metal shielding tape to provide a helical shielded twisted pair cable with an overlap of said shielding tape and said shielding tape having a metal thickness of 0.75 to 1.25 mils ~~0.33 to 2.00 mils~~, and said shielding tape being selected from the group consisting of a metal tape, a first composite tape having a non-metal base and a layer of metal on one side of said base, and a second composite tape having a non-metal base and a layer of metal on both sides of said base; and

helically wrapping the metal shield with an overlap of 45-55% and at an angle to the longitudinal axis of the twisted pair cable of 30-45° and at a tension to eliminate a substantial amount of the air to leave a cross-sectional void area of less than 18% of the cross-sectional area of the shielded twisted pair cable to provide said helical shielded twisted pair data cable ; and that to provide provides said helical shielded twisted pair cable with a rating out to 600 MHz and an adjusted to 20°C. standard impedance deviation of 3.5 or less when said standard impedance deviation is measured on a 328 ft. or longer cable with at least 350 frequency

measurements being taken and the standard impedance being calculated around a mean or average impedance of 50 to 200 ohms.

11. (cancelled).

12. (original) The method of claim 10 further comprising bundling at least four of said helical shielded twisted pair cables; and extruding a jacket over the at least four bundled helical shielded twisted pair cables to provide a high performance data cable.

13. (cancelled)

14. (cancelled)

15. (cancelled)

16. (currently amended) The method of claim 17 441 further comprising bundling at least four of said helical shielded twisted pair cables; and extruding a jacket over the at least four bundled helical shielded twisted pair cables to provide a high performance data cable.

17. (currently amended) The method of claim 10 46 wherein said ~~high performance data cable is rated out to at least 600 MHz and has an average standard impedance deviation of 3.5 or less when taken on a 328 ft. or longer high performance data cable and said average standard impedance deviation is the average of all of the standard impedance deviations measured on each of said at least four helical shielded twisted pair cables with at least 350 frequency measurements~~ are from 1.0 to 600 MHz and calculated around the mean or average impedance of 90 to 110 ohms, and no single standard impedance deviation is greater than 4.5 from said mean or average impedance.